Amendments to the Claims under 37 C.F.R. § 1.121

Claim 1 (currently amended): A reagent for detecting human papilloma virus (HPV) DNA in a cell sample which indicates the patient providing the cell sample is at risk for cancer, comprising a plurality of genomic HPV DNA probe sets; wherein:

(a) a first genomic HPV DNA probe set comprises a plurality of labeled nucleic acid fragments prepared by labeling essentially the full-length genomic sequence of HPV type 16, and which constitute approximately 8.3% of the total HPV DNA in the reagent,

(b) a second genomic HPV DNA probe set comprises a plurality of labeled nucleic acid fragments prepared by labeling essentially the full-length genomic sequence of HPV type 18, and which constitute approximately 20.8% of the total HPV DNA in the reagent,

(c) a third genomic HPV DNA probe set comprises a plurality of labeled nucleic acid fragments prepared by labeling essentially the full-length genomic sequence of HPV type 31, and which constitute approximately 8.3% of the total HPV DNA in the reagent,

(d) a fourth genomic HPV DNA probe set comprises a plurality of labeled nucleic acid fragments prepared by labeling essentially the full-length genomic sequence of HPV type 33, and which constitute approximately 20.8% of the total HPV DNA in the reagent,

(e) a fifth genomic HPV DNA probe set comprises a plurality of labeled nucleic acid fragments prepared by labeling essentially the full-length genomic sequence of HPV type 35, and which constitute approximately 20.8% of the total HPV DNA in the reagent, and

(f) a sixth genomic HPV DNA probe set comprises a plurality of labeled nucleic acid fragments prepared by labeling essentially the full-length genomic sequence of HPV type 51, and which constitute approximately 20.8% of the total HPV DNA in the reagent;

wherein the labeled nucleic acid fragments of the genomic HPV DNA probe sets detectably hybridize to the genomic sequence of HPV types 39, 45, 52, 56, 58, 59, 68 and 70 in addition to detectably hybridizing to the genomic sequence of HPV types 16, 18, 31, 33, 35, and 51;

and wherein the labeled nucleic acid fragments of the genomic HPV DNA probe sets do not detectably hybridize to the genomic sequence of HPV types 42, 43, or 44.

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Claims 2-16 (cancelled).

Claim 17 (previously presented): A kit for detecting human papilloma virus DNA in a sample comprising a container containing the reagent of claim 1.

Claim 18-24 (cancelled).

Claim 25 (new): The reagent of claim 1, wherein the plurality of labeled nucleic acid fragments of the genomic HPV DNA probe sets are labeled by nick translation.

Claim 26 (new): The reagent of claim 1, wherein the plurality of labeled nucleic acid fragments of the genomic HPV DNA probe sets are labeled by polymerase chain reaction (PCR).

Claim 27 (new): The reagent of claim 1, wherein the plurality of labeled nucleic acid fragments of the genomic HPV DNA probe sets are labeled by random priming.

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